## The Oak Woodland Bird Conservation Plan: A Strategy for Protecting and Managing Oak Woodland Habitats and Associated Birds in California<sup>1</sup>

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Over 330 species of birds, mammals, reptiles, and amphibians depend on oak woodlands in California at some stage in their life cycle. California oak woodlands may rank among the top three habitat types in North America for bird richness. Oak woodlands are able to sustain such abundant wildlife primarily because they produce acorns, a high quality and frequently copious food supply. Oaks also provide important shelter in the form of cavities for nesting. Moreover, oak woodlands are among the most highly prized of California's landscapes, for both aesthetic reasons and utilitarian needs such as firewood collection and grazing.

California's oak woodlands are threatened in many ways. Ongoing loss to development and agriculture, the lack of regeneration of several key tree species, and the recent "Sudden Oak Death Syndrome" crisis are the main threats to oak woodland habitat. Today only two-thirds of California's original oak woodlands remain (approximately 7 million acres). Of those, only about 4 percent enjoy protected status. Lack of recruitment of young oaks combined with the SODS epidemic affect 7 of the 10 acorn-bearing species of oak tree in California. The combined effect of these two problems on native wildlife populations is inestimable.

The Oak Woodland Bird Conservation Plan (BCP) has been developed by California Partners in Flight to guide conservation policy and action on behalf of oak woodland habitats and wildlife, with the goal of supporting the long-term viability and recovery of both native bird populations and other native species. This BCP will serve as a repository for information, published and unpublished, on the ecology, distribution, and status of focal bird species, historic and current threats, landscape patterns, and conservation measures. This plan, along with the associated Geographic Information System (GIS) database of oak woodland habitats and monitoring data maintained at the Point Reyes Bird Observatory (PRBO), is the first iteration of a continuous process of updating habitat conservation recommendations based on the latest scientific monitoring and research data.

Designing conservation efforts for oak woodland habitats based on the needs of birds is useful because birds occupy a diverse range of niches within oak woodlands:

<sup>&</sup>lt;sup>1</sup> This paper summarizes a poster that was presented at the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape, October 22-25, 2001, San Diego, California.

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from those that nest on the ground to those that nest in the cavities of mature trees, those that feed primarily on insects and those that rely heavily on the acorn mast from year to year. Evidence and experience indicate that by managing for a diversity of birds, diverse oak woodland habitat structure will be maintained, and many other elements of terrestrial biodiversity will be conserved.

This BCP addresses the problems facing landbirds in oak woodland habitats throughout California and provides science-based recommendations to both public and private landowners. It outlines specific conservation action items, including detailed management, acquisition, and research recommendations, designed to heighten our understanding of how the threats and issues surrounding California's oak woodlands are and will affect the birds that are intimately connected to them.

At over 120 sites throughout California, monitoring data on oak woodland birds have been collected continuously over the past 10 years. This BCP places an emphasis on a suite of 7 bird species chosen because of their conservation interest to serve as focal species representative of the range of oak habitats in the state. Visit the Web site "http://www.prbo.org/CPIF/Oaks/oak\_directory.html" to view maps of oak woodland habitat coverage, focal species ranges and PIF monitoring sites in California. Preliminary analyses of the seven focal species' habitat requirements reveal the following:

Four of seven focal species have experienced significant population declines, local extirpations, or both. The only species that appears to be significantly and consistently increasing is the western scrub-jay, a bird that adjusts readily to urbanization but is also an important nest predator of many other native bird species.

Loss of habitat or habitat structure (such as dead standing trees, mature trees with cavities, or a shrubby understory component) is implicated as a likely cause of decline and/or other problems for five of the seven focal species.

Accordingly, a series of conservation recommendations are provided, focusing primarily on protection, restoration and management of habitat that will facilitate and promote natural oak woodland regeneration. Other recommendations focus on the need to promote nest success, by retaining mature oaks in altered landscapes to provide nest cavities and by keeping down the number of native and introduced nest predators. Species-specific conservation recommendations for the western bluebird, Blue-gray Gnatcatcher and Acorn Woodpecker are also defined.

High priority conservation areas or "portfolio sites," distinguished by their protected status and potential for managing oak woodland habitat through restoration, are identified within the 10 bioregions of California as defined by the California Biodiversity Council. Through a process of adaptive conservation planning, conservation action items will continuously be derived from a synthesis of proven practices, species' distributions and ecologies, and land-use patterns. Information gaps revealed will guide future research and monitoring. The plan itself is available at the Web site: http://www.prbo.org/CPIF/Consplan.html.